

ANALYST:		VPDES NO	
----------	--	----------	--

Parameter: Hydrogen Ion (pH)

Method: Electrometric

08/06

METHOD OF ANALYSIS:

	18th EDITION STANDARD METHODS-4500-H-B
	EPA METHODS FOR CHEMICAL ANALYSIS-150.1
	ASTM-D1293-84(90)(A or B)
	<u>USGS-METHODS IN WATER AND FLUVIAL SEDIMENTS-I-1586-85</u>

		Y	N
1)	Is the electrode in good condition (no chloride precipitate, etc.)? [SM-2.b/c and 5.b; 150.1-4.3/Permit]		
2)	Is electrode storage solution in accordance with manufacturer's instructions? [Mfr.]		
3)	Is meter calibrated on at least a daily basis? [SM-4.a; 150.1-8.1]		
4)	Are two buffers which bracket the anticipated range of the sample used to calibrate the meter? (For meters not capable of performing a two point calibration is a second buffer which brackets the sample pH analyzed and found to be within ± 0.1 SU of the expected value?) [SM-2.a; 150.1-7.2]		
5)	Is meter calibration documented? [Permit]		
6)	Does meter read within 0.1 SU for the pH of the second buffer solution? [SM-4.a/5.b; 150.1-7.2.1]		
7)	After calibration, is a buffer of 7 SU analyzed as a check sample to verify that calibration is correct? Agreement should be within ± 0.1 SU. [Permit]		
8)	Do the buffer solutions appear to be free of contamination or growths? [SM-3.a; Permit]		
9)	Are buffer solutions within their listed shelf life or have they been prepared within the last 4 weeks? [SM-3.a; 150.1-6.1.1]		
10)	Is the cap or sleeve covering the access hole on the reference electrode removed when measuring pH? [Mfr.]		
11)	Is the temperature of buffer solutions and samples measured prior to testing? [SM-1.a; 150.1-9.1]		
12)	For meters with ATC that also have temperature display, was the thermometer calibrated annually?		
13)	Was the electrode rinsed between solutions? [SM-4.a; 150.1-8.4]		
14)	Was the electrode blotted dry between solutions (disregard if rinse is next solution)? [SM-4.a; 150.1-8.4]		
15)	Is the sample stirred gently at a constant speed during measurement? [SM-4.b; 150.1-8.4]		
16)	Does the meter hold a steady reading after reaching equilibrium? [SM-4.b/5 ;150.1-8.4]		

PROBLEMS: